



AECOM
303 E. Wacker Drive, Suite 900
Chicago, Illinois 60601

312-938-0300 tel
312-938-1109 fax

October 28, 2013

Mr. John Doherty
Ewing-Doherty Mechanical, Inc.
304 North York Road
Bensenville, IL 60106

RE: Radiological Survey of Right-of-Way Utility Excavation
Permit No.: 354480750
Permit Address: 332 East North Water Street
AECOM Project No. 60241812

Dear Mr. Doherty:

Pursuant to conditions specified in a permit (see attached) issued by the City of Chicago, radiation monitoring was required to be performed at the above referenced site. AECOM Technical Services, Inc. (AECOM) provided the required radiation monitoring between the days of October 8 and 11, 2013 for trench excavations to install the water service to new construction (i.e., 455 N. Park).

Surveying was conducted in 18-inch lifts for soils removed from a 4-foot wide by approximately 80-foot long trench excavation to a maximum depth of about 5-feet below the pavement/ground surface in the Rights-of-Way (ROW) of East North Water Street (see attached sketch). The gamma survey monitoring revealed no indication of soils above the cleanup value established by the U.S. Environmental Protection Agency (USEPA) for the Streeterville area of Chicago. The USEPA cleanup value for Chicago's Streeterville area is 7.1 picocuries per gram (pCi/g) total radium (Ra-226 + Ra-228).

Gamma radiation measurements for the project were made using a Ludlum Model 2221 survey meter and an unshielded 2 x 2 inch sodium iodide (NaI) probe Model 44-10. For the field instrument used, the gamma count equivalent to the USEPA 7.1 pCi/g cleanup value was 18,701 counts per minute (cpm) unshielded. Thus, gamma readings above 18,701 cpm threshold would be considered a potential indication of the presence of radiologically contaminated fill soil.

The field gamma background for the area was measured at approximately 7,900 cpm unshielded. In general, field gamma measurements greater than twice background represent potential anomalous results that require more cautious field screening, but are not necessarily indications of the presence of thorium contaminated fill soil.

The excavation spoil was urban fill with slag and cinders. The field gamma measurements within the excavation and of the spoil materials generated during the excavation process did not exceed the threshold value equivalent to the USEPA cleanup value previously stated and ranged from a minimum of 5,000 cpm to a maximum of 15,000 cpm unshielded. The majority of the gamma readings were less than 10,000 cpm, but the highest values (between 14,000 and 15,000 cpm) were observed at the base of the trench (i.e., maximum/final depth) while utilizing an unshielded probe. It is believed these readings were biased high because of depth of the trench and the use of an unshielded probe. In any case, there was no indication of the presence of radiologically-contaminated fill soil and/or an exceedance of the USEPA cleanup value of 7.1 pCi/g total radium.

As part of the permit conditions this letter has been forwarded to:

Radiological Survey of Right-of-Way Utility Excavation
Permit No.: 354480750
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Chicago Department of Public Health
Attention: Ms. Rahmat Begum
333 South State Street, Room 200
Chicago, Illinois 60604

Please contact us with any questions you have regarding this letter or the reported results.

Regards,



Brian R. Schmidt
Project Scientist II



Steven C. Kornder, Ph.D.
Senior Project Geoscientist

cc: Rahmat Begum, Chicago Department of Public Health
Verneta Simon, USEPA

Attachments: Permit
Contractor Drawing
Survey Sketch



DEPARTMENT OF PUBLIC HEALTH
CITY OF CHICAGO

FORM NO. CDPH.ROW.03

Notice is hereby given that the site you have requested a permit for is recorded with the City of Chicago Department of Public Health (CDPH) as potentially having environmental contamination on the site and adjacent right-of way. This environmental contamination could present a threat to human health and safety in connection with work performed at the site, or in the adjacent right-of-way, if proper safeguards are not employed.

A file containing detailed information regarding the aforementioned environmental contamination is available for review at CDPH at 333 S. State St., Room 200, Chicago, Illinois 60604 during normal business hours (8:30AM-4:30PM, Monday through Friday). Contact (312) 745-3152 for an appointment. This file must be reviewed and the remainder of this form completed before the permit can be issued if the ground is exposed or excavated. **Please note that for some locations, additional health and safety procedures may be required by law.**

Please complete the following:

I have reviewed and understand the documents, maintained by CDPH, regarding environmental contamination of the site and adjacent right-of-way. Further, I will ensure that all work at the subject site and adjacent right-of-way, and any monitoring required including but not limited to radiation monitoring, will be performed in a manner that is protective of human health and the environment and in compliance with all applicable local, state, and federal laws, rules, and regulations, especially those pertaining to worker safety and waste management. I will ensure that the results of any radiation monitoring and/or surveying conducted shall be provided to the CDPH and the United States Environmental Protection Agency **within two (2) weeks of their completion**. If any elevated levels of radioactive material are detected, I will immediately contact the United States Environmental Protection Agency at (800) 424-8802.

Applicant Name (print): John Doherty

Signature: [Signature]

Site Address and Work Location (Describe exact site location and attach map): 332 E North Water st

Nature of Work: Water Service - New

Company Name, Address, Phone No.: Ewing-Doherty Mechanical, Inc. 630-766-5920
304 North York Road, Bensenville, IL 60106

General / Prime Contractor Name, Address, Phone No.: Lend LEase 312-245-5490

Include subcontractor information if applicable)

Safety Officer / Phone No. Gloria Zamora 312-841-4212

Radiation Contractor / Phone No. (if applicable) AECOM 750 Corporate Woods PKWY, Vernon Hills IL 847-279-2500

Check if City Department Work ☐ Department Name: _____

CDOT Permit No.: 354480750

Today's Date: 9/20/2013 Expected Start Date: 9/22/2013

CDPH Approval / Date

[Signature]

Please return this completed form to the Chicago Department of Transportation, Division of Infrastructure Management, Public Way Permit Office, City Hall - Room 905, 121 N. LaSalle St., Chicago, Illinois 60602 during normal business hours (8:30 AM - 4:30 PM, Monday through Friday)

For CDPH Use Only

SMB
10.10.2012

See Sheet P2/B2 For Trench Drain Connections to Sanitary System (Typ.)

See Electrical Drawings For Continuation Into Building,
Routing Shown For Reference Only Per Electrical Drawings

Do Not Damage Column During
Water Service Installation, Contact
Engineer if Conflict Exists
Between Proposed Water Service
& Column

AT&T Service Shown
Approx., See MEP
Drawings For Continuation,
Contractor to Coordinate
Connection with Utility
Provider

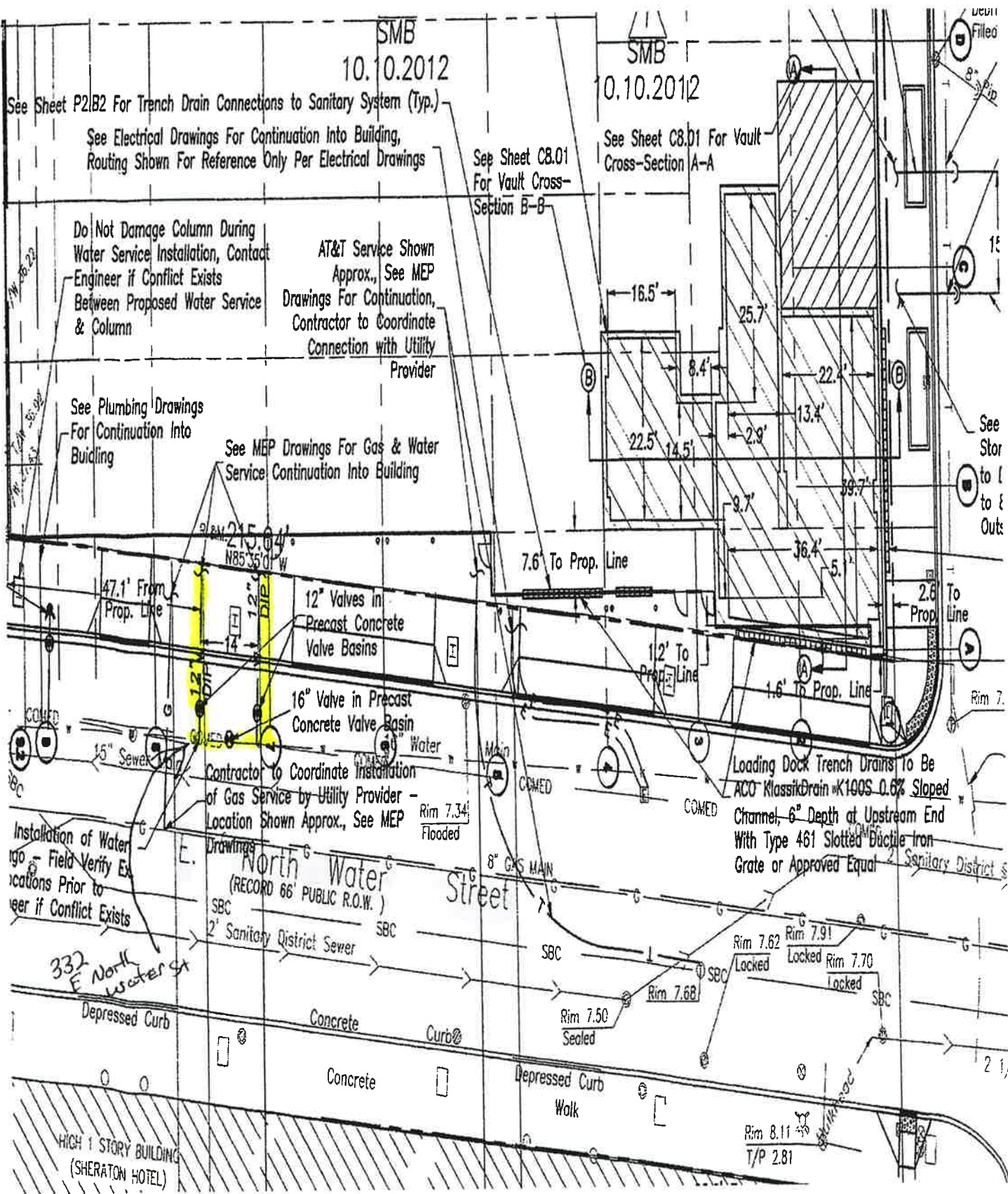
See Plumbing Drawings
For Continuation Into
Building

See MEP Drawings For Gas & Water
Service Continuation Into Building

See Sheet C8.01
For Vault Cross-
Section B-B

See Sheet C8.01 For Vault
Cross-Section A-A

See Stor
to l
to f
Outs



Installation of Water
go - Field Verify Ex
ications Prior to
eer if Conflict Exists

Contractor to Coordinate Installation
of Gas Service by Utility Provider -
Location Shown Approx., See MEP
Drawings

Loading Dock Trench Drains To Be
ACO KlassikDrain K100S 0.6% Sloped
Channel, 6\"/>

332 E North
Water St

North Water
Street
(RECORD 66' PUBLIC R.O.W.)

Rim 8.11
T/P 2.81

JOB TITLE 455 N Park Water Service
 JOB NO. 60941812 CALCULATION NO. _____
 ORIGINATOR RLB DATE 10/11/13
 REVIEWER SLK DATE 10/14/13
 SCALE NTS SHEET NO. 1 OF 1

